ABSTRACT

A method for decoding multiword information comprises multiple steps. In step (a), a multiword information cluster, e.g., ECC, including high protective codewords, e.g., BIS, and low protective codewords, e.g., LDC, is provided. In step (b), the high and low protective codewords are stored into a first memory, e.g., DRAM. In step (c), the high protective codewords are decoded to generate high protective word erasure indicators showing whether decoding errors occur. In step (d), the high protective word erasure indicators are stored into a second memory, e.g., SRAM. In step (e), the low protective codewords are decoded. In the meanwhile, an erasure bit for a low protective codeword is marked by finding high protective codewords close to the low protective codeword in the multiword information cluster and looking up the high protective word erasure indicators of the high protective codewords close to the low protective codeword.